

What I need to know about Constipation



National Institute of
Diabetes and Digestive
and Kidney Diseases

National Digestive Diseases
Information Clearinghouse

What I need to know about Constipation

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What is constipation?

Constipation* is a condition in which you have one or both of the following:

- fewer than three **bowel** movements a week
- bowel movements with stools that are hard, dry, and small, making them painful or difficult to pass

You may have pain or bloating—a feeling of fullness—in your **abdomen**, the area between your chest and hips.

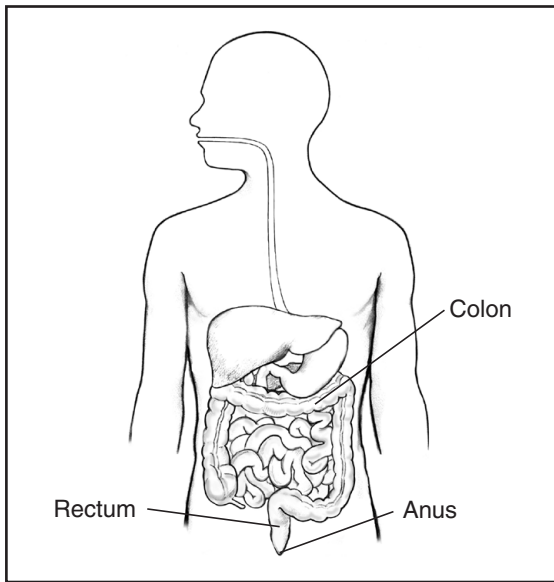
Bowel habits aren't the same for all people. Some people think they have constipation if they don't have a bowel movement every day. Some people may have three bowel movements a day. Other people may only have three bowel movements a week.

Most people get constipated sometimes. Constipation usually lasts for only a short time and is not dangerous. When you know what causes constipation, you can take steps to find relief.

*See page 22 for tips on how to say the words in **bold** type.

What is the gastrointestinal (GI) tract?

The GI tract is a series of hollow organs joined in a long, twisting tube from your mouth to your **anus**—the opening where stool leaves your body. The lower GI tract consists of your large **intestine**—which includes your colon and **rectum**—and anus. Your intestines are sometimes called your bowel.



The lower GI tract

Your body digests food as it moves through the GI tract. The leftover waste from the digested food enters your large intestine as liquid. Your large intestine absorbs water and changes the liquid to a solid form called stool. Stool passes from your colon to your rectum where it is stored before a bowel movement. The muscles of your rectum move stool to your anus and out of your body.

How common is constipation and who is affected most?

Constipation is one of the most common GI problems in the United States. Constipation occurs more often in

- women
- adults ages 65 and older
- **non-Caucasians**
- people with lower incomes

Many women get constipated during pregnancy or after giving birth. Constipation is also common after surgery. People taking medicines to treat depression or to relieve pain from things such as a broken bone, a pulled tooth, or back pain may have constipation.



Many women get constipated during pregnancy.

What causes constipation?

Constipation is caused by stool spending too much time in your colon. Common things that can lead to constipation include the following:

- **Diets low in fiber.** The most common cause of constipation is a diet with too little fiber. Fiber is found in food that comes from plants. Fiber helps stool stay soft so it moves smoothly through your colon. Liquids such as water and juice help fiber work better.
- **Lack of physical activity.** If you have to stay in bed and cannot exercise, you may get constipated. Scientists don't know why this happens.
- **Medicines.** Some medicines used to treat other health problems can cause constipation. You can also get constipated if you use over-the-counter **laxatives** too often. A laxative is medicine that loosens stool and increases bowel movements. If you use laxatives too much, your colon can't contract as well. The nerves, muscles, and tissues in your large intestine may get damaged.

- **Life changes or daily routine changes.** Your bowel movements can change when you travel, if you're pregnant, and as you get older.
- **Ignoring the urge to have a bowel movement.** If you ignore the urge to have a bowel movement, over time, you may stop feeling the need to have one. This habit can lead to constipation.
- **Certain health problems.** Some health problems can make stool move more slowly through your colon, rectum, or anus. These problems may lead to constipation. Examples are disorders that affect your brain and spine, such as spinal cord injuries and **Parkinson's disease**, and disorders that affect how your body gets energy from food, such as **diabetes** or **hypothyroidism**. Parkinson's disease is a disorder that affects nerve cells in a part of your brain that controls muscle movement. Hypothyroidism is a disorder that causes your body to produce too little thyroid hormone, which can cause many of your body's functions to slow down.
- **GI tract problems.** Problems in your GI tract that compress or narrow your colon and rectum can cause constipation.

- **Functional GI disorders.** Functional GI disorders are problems caused by changes in how your GI tract works. If you have a functional disorder, you may have frequent symptoms, but your GI tract doesn't become damaged. Functional constipation is often caused by problems with the muscles in your colon or anus that make stool move more slowly. Irritable bowel syndrome is a functional GI disorder that has constipation as a symptom.

How is the cause of constipation diagnosed?

To find out why you have constipation, your doctor will

- take your medical history
- perform a physical exam
- order tests

Medical History

The medical history will include questions about your constipation, such as

- how long you've had symptoms
- how often you have a bowel movement
- what your stools look like and whether you have blood in your stool



To find out why you have constipation, your doctor will take your medical history.

Your doctor may also ask about

- your eating habits
- your level of physical activity
- medicines you take

Physical Exam

The physical exam may include a rectal exam. Your doctor will insert a finger into your anus to check for tenderness, blockage, or blood. Your doctor may test for blood in your stool by putting a small sample of your stool on a paper card and adding a drop or two of testing liquid. A color change is a sign of blood in your stool.

Tests

The tests your doctor orders depend on

- how long you've had constipation
- how severe your constipation is
- your age
- whether you've had blood in your stool, recent changes in bowel habits, or weight loss

Your doctor may order one or more of these tests:

- blood test
- lower GI series
- **flexible sigmoidoscopy or colonoscopy**
- **colorectal transit studies**
- **anorectal function tests**
- **defecography**

Blood test. For a blood test, a blood sample will be taken in your doctor's office or a commercial facility. Your blood sample is sent to a lab for testing. The blood test can show if you have a disease or condition causing your constipation. For example, low levels of thyroid hormone may mean that you have hypothyroidism.

Lower GI series. A lower GI series is an x-ray exam that is used to look at your large intestine. For the test, you will lie on a table while your doctor inserts a flexible tube into your anus. Your large intestine is filled with **barium**, a chalky liquid, making signs of problems that may be causing constipation show up more clearly on x rays.

Flexible sigmoidoscopy or colonoscopy. The tests are similar, but a colonoscopy is used to view your rectum and entire colon, while a flexible sigmoidoscopy is used to view just your rectum and lower colon. For either test, you will lie on a table while your doctor inserts a flexible tube into your anus. A small camera on the tube sends a video image of your bowel lining to a computer screen. The test can show signs of problems in your lower GI tract.



Colonoscopy is used to view the entire colon and rectum.

Your doctor may also perform a biopsy, a test that involves taking a small piece of bowel lining tissue and looking at it with a microscope. You won't feel the biopsy.

Colorectal transit studies. These tests show how well food moves through your colon.

- **Radiopaque markers.** With this test, you swallow capsules with small markers that can be seen on an x ray. Three to 7 days after you swallow the capsules, **abdominal** x rays, taken several times, track the movement of the markers through your colon. You eat a high-fiber diet to help stool move through your GI tract.
- **Scintigraphy.** With this test, you eat a meal with radioactive substances. The dose of radioactive substances is small, so scintigraphy is not likely to damage your cells. Special cameras placed outside your body over your abdomen and computers are used to create pictures of the radioactive substances as they move through your intestine.

Anorectal function tests. These tests diagnose constipation caused by a problem in your GI tract that affects your anus or rectum.

- **Anal manometry** uses pressure sensors and a balloon that can be inflated in your rectum to check how sensitive your rectum is and how well it works. Anal manometry also checks the tightness of the muscles around your anus and how well they respond to nerve signals. For this test, a specially trained nurse or assistant puts a thin tube with a balloon on its tip and pressure sensors below the balloon into your anus. Once the balloon reaches your rectum and the pressure sensors are in your anus, the tube is slowly pulled out to measure muscle tone and contractions. The test takes about 30 minutes.
- **Balloon expulsion tests** consist of filling a balloon with different amounts of water after it has been placed in your rectum. You are given a stopwatch and are told to go to the restroom and measure the amount of time it takes to push the balloon out. If you can't push out a balloon filled with less than 150 milliliters of water or it takes longer than 1 minute to push the balloon out, you may have a problem pushing out stool.

Defecography. This x ray of the area around your anus and rectum shows whether you have problems with

- pushing stool out of your body
- the function of your anus and rectum
- squeezing and relaxing your rectal muscles

This test can also show changes in your anus or rectum. During the test, your doctor fills your rectum with a soft paste that shows up on x rays and feels like stool. You sit on a toilet inside an x-ray machine. Your doctor will ask you to first pull in and squeeze muscles to keep stool in. Then, your doctor will tell you to strain to have a bowel movement. Your doctor looks for problems as you push the paste out.

How is constipation treated?

Treatment for constipation depends on

- what's causing your constipation
- how bad your constipation is
- how long you've been constipated

Treatment may include

- changes in eating, diet, and nutrition
- exercise and lifestyle changes

- medicines
- biofeedback
- surgery

First-line treatments for constipation include changes in eating, diet, and nutrition; exercise and lifestyle changes; and laxative medicines. If you don't respond to these first-line treatments, you should talk with your doctor about other treatments.

Eating, Diet, and Nutrition

The Academy of Nutrition and Dietetics recommends getting 20 to 35 grams of fiber a day for adults. Talk with your doctor to plan a diet with the right amount of fiber for you. Be sure to add fiber to your diet a little at a time so your body gets used to the change. Try not to eat too many foods with little or no fiber, such as pizza, ice cream, cheese, meat, chips, and processed foods. A list of high-fiber foods is shown on page 15.

Drink water and other fluids, such as fruit and vegetable juices and clear soups, to help fiber in your diet work better to make your stools more normal and regular. Ask your doctor about how much you should drink each day based on your health and activity level and where you live.



Examples of Foods That Have Fiber

Beans, cereals, and breads

Beans, cereals, and breads	Fiber
1/2 cup of beans (navy, pinto, kidney, etc.), cooked	6.2–9.6 grams
1/2 cup of shredded wheat, ready-to-eat cereal	2.7–3.8 grams
1/3 cup of 100% bran, ready-to-eat cereal	9.1 grams
1 small oat bran muffin	3.0 grams
1 whole-wheat English muffin	4.4 grams

Fruits

1 small apple, with skin	3.6 grams
1 medium pear, with skin	5.5 grams
1/2 cup of raspberries	4.0 grams
1/2 cup of stewed prunes	3.8 grams

Vegetables

1/2 cup of winter squash, cooked	2.9 grams
1 medium sweet potato, baked in skin	3.8 grams
1/2 cup of green peas, cooked	3.5–4.4 grams
1 small potato, baked, with skin	3.0 grams
1/2 cup of mixed vegetables, cooked	4.0 grams
1/2 cup of broccoli, cooked	2.6–2.8 grams
1/2 cup of greens (spinach, collards, turnip greens), cooked	2.5–3.5 grams

Source: U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2010*.

Exercise and Lifestyle Changes

Regular exercise helps your digestion. Exercising 20 to 30 minutes every day may help with constipation.

You can also try to have a bowel movement at the same time each day. The best time is 15 to 45 minutes after breakfast. Eating helps your colon move food and waste. Make sure you give yourself enough time to have a bowel movement. You should also use the bathroom as soon as you feel you need to have a bowel movement.



Medicines

If you're taking a medicine that can cause constipation, your doctor may suggest you stop taking it or switch to a different medicine.

Your doctor may suggest a laxative for a short time if you're doing all the right things and are still constipated. Your doctor will tell you what type of laxative is best for you. Laxatives come in many forms, including liquid, tablet, powder, and granules. Read more about the different types of laxatives in *Constipation* at www.digestive.niddk.nih.gov.

If you've been taking laxatives for a long time and can't have a bowel movement without taking a laxative, talk with your doctor about how you can slowly stop using them. If you stop taking laxatives, over time, your colon should start squeezing better.

Biofeedback

If you have problems with the muscles and nerves that control bowel movements, your doctor may suggest biofeedback. Biofeedback uses special sensors to measure bodily functions. The measurements are shown on a video screen as line graphs. Your doctor teaches you how to change abnormal function. You practice what you learn at home to improve muscle function. You may have to practice for 3 months before you get all the benefit from the training.

Surgery

You may need surgery if other treatments don't work. One surgery is to have your colon removed. Your doctor can tell you about the benefits and risks of surgery.

Points to Remember

- Constipation is a condition in which you have one or both of the following:
 - fewer than three bowel movements a week
 - bowel movements with stools that are hard, dry, and small, making them painful or difficult to pass
- Most people get constipated sometimes. Constipation usually lasts for only a short time and is not dangerous.
- Constipation occurs more often in women, adults ages 65 and older, non-Caucasians, and people with lower incomes.
- To find out why you have constipation, your doctor will
 - take your medical history
 - perform a physical exam
 - order tests

- Treatment for constipation depends on
 - what's causing your constipation
 - how bad your constipation is
 - how long you've been constipated
- Treatment may include one or more of the following:
 - changes in eating, diet, and nutrition
 - exercise and lifestyle changes
 - medicines
 - biofeedback
 - surgery

Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and other components of the National Institutes of Health (NIH) conduct and support basic and clinical research into many digestive disorders, including constipation.

Clinical trials are research studies involving people. Clinical trials look at safe and effective new ways to prevent, detect, or treat disease. Researchers also use clinical trials to look at other aspects of care, such as improving the quality of life for people with chronic illnesses. To learn more about clinical trials, why they matter, and how to participate, visit the NIH Clinical Research Trials and You website at www.nih.gov/health/clinicaltrials. For information about current studies, visit www.ClinicalTrials.gov.

Pronunciation Guide

abdomen (AB-doh-men)

abdominal (ab-DOM-ih-nuhl)

anal manometry (AY-nuhl) (muh-NOM-uh-tree)

anorectal function tests (AY-noh-REK-tuhl)
(FUHNK-shuhn) (tests)

anus (AY-nuhss)

balloon expulsion tests (buh-LOON)
(ik-SPUHL-shuhn) (tests)

barium (BA-ree-uhm)

bowel (boul)

colonoscopy (KOH-lon-OSS-kuh-pee)

colorectal transit studies (KOH-loh-REK-tuhl)
(TRAN-zit) (STUHD-eez)

constipation (KON-stih-PAY-shuhn)

defecography (DEF-uh-KOG-ruh-fee)

diabetes (DY-uh-BEE-teez)

flexible sigmoidoscopy (FLEK-suh-buhl)
(SIG-moy-DOSS-kuh-pee)

hypothyroidism (HY-poh-THY-royd-izm)

intestine (in-TESS-tin)

laxatives (LAK-suh-tivz)

non-Caucasians (non-kaw-KAY-zhuhnz)

Parkinson's disease (PAR-kin-suhns) (dih-ZEEZ)

radiopaque markers (RAY-dee-oh-PAYK)
(MARK-urz)

rectum (REK-tuhm)

scintigraphy (sin-TIG-ruh-fee)

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This publication is available at www.digestive.niddk.nih.gov.

This publication may contain information about medications and, when taken as prescribed, the conditions they treat. When prepared, this publication included the most current information available. For updates or for questions about any medications, contact the U.S. Food and Drug Administration toll-free at 1-888-INFO-FDA (1-888-463-6332) or visit www.fda.gov. Consult your health care provider for more information.



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